

Summary Comparison of Short-Listed Tunnel Reconstruction Methods

	Preferred Reconstruction Method	Other Tunnel Reconstruction Methods Considered				
	Rehabilitate Existing Tunnel	Parkway with Traffic Signals	Parkway with Underpass at Beacon Street	New Westbound Tunnel with At- Grade Eastbound Parkway	New East and Westbound Tunnels	New East and Westbound Tunnels with pedestrian mall
Construction Cost*	\$50 to 55 million	\$24 million	\$61 million	\$83 million	\$216 million	\$131 million
Service Life	60 years	100 years	75 years	75 years	75 years	75 years
Annual Capital Cost, without Interest, Over Service Life*	\$0.9 million	\$0.2 million	\$0.8 million	\$1.1 million	\$2.9 million	\$1.7 million
Annual Operating Costs*	\$200,000	\$100,000	\$150,000	\$300,000	\$900,000	\$600,000
Esplanade Open Space Gained	+ 0.1 acre	+0.7 acre	+ 0.7 acre	+ 1.1 acres	+1.77 acres	+ 0.9 acre
Pedestrian/Bicycle Connection	New ADA accessible Fiedler footbridge	At-grade crossings at Arlington and Berkeley Streets	New ADA accessible Fiedler footbridge	At-grade crossings at Arlington and Berkeley Streets	Pedestrian Mall at Mt. Vernon, Beacon & Berkeley Streets	Pedestrian Mall at Beacon St. and at-grade at Berkeley St.
Groundwater Impacts	New groundwater recharge system	None	New groundwater recharge system	New groundwater recharge system	New groundwater recharge system	New groundwater recharge system
Through Traffic Impact	None	Reduces peak capacity by 40%	None	Reduces Eastbound peak capacity by 40%	None	None
Changes to Existing Entrances and Exits	None	None are eliminated, but most become signalized	Close west on at Berkeley Street Add east off to Dartmouth Street Close east off to Arlington Street	None are eliminated, but most become signalized	Close west on at Berkeley Street Add west on at Clarendon Street (in lieu of WB-on at Berkeley) Close east off at Clarendon Street Add east off to Dartmouth Street (in lieu of EB off at Clarendon)	Add east off to Dartmouth Street Close east off to Arlington Street
Financial Benefit from Interim Repairs	Approximately \$4 Million of the repairs will be utilized	No benefit	No benefit	No benefit	No benefit	No benefit
Construction Duration	1.9 to 2.4 years	1.9 years	3.5 years	3.0 years	5.0 years	4.2 years

* Estimated costs are based on 2007 dollars.